

CLAIMS

1. A compressor comprising:

a container;

a compression mechanism disposed in a lower portion of said container;

a rotational motor disposed in an upper portion of said container, said rotational motor having a stator and a rotor;

a coil end provided on each of upper and lower ends of said stator;

a discharge pipe provided on an upper end of said container;

an oil reservoir provided in a lower portion of said container;

and

a gap provided between said rotational motor and said container, said gap being operable to introduce working fluid, which is compressed by said compression mechanism, into an upper space of said container;

wherein the working fluid is discharged from said container through said discharge pipe; and

wherein said discharge pipe has an open end in said container, the open end being located inside said coil end provided on the upper end of said stator.

2. The compressor according to claim 1, wherein said

discharge pipe has a curved portion in said container.

3. The compressor according to claim 2, wherein said discharge pipe is provided on a side surface of said container.

4. The compressor according to claim 1, wherein the open end of said discharge pipe in said container is disposed to face downstream of a rotational direction of said rotor.

5. The compressor according to claim 1, wherein the open end of said discharge pipe in said container is located in a vicinity of a rotation center axis of said rotor.

6. The compressor according to claim 1, wherein an inner diameter of the open end of said discharge pipe located inside said container is larger than an inner diameter of said discharge pipe located outside of said container.

7. A compressor comprising:

a container;

a compression mechanism disposed in a lower portion of said container;

a rotational motor disposed in an upper portion of said container,
said rotational motor having a stator and a rotor;

a coil end provided on each of upper and lower ends of said stator;
a discharge pipe provided on an upper end of said container;
an oil reservoir provided in a lower portion of said container;
and

a gap provided between said rotational motor and said container,
said gap being operable to introduce working fluid, which is compressed
by said compression mechanism, into an upper space of said container;
and

a substantially cylindrical dividing member provided in the upper
space of said container and being operable to divide the upper space
into an inner space and an outer space;

wherein said discharge pipe has an open end in said container,
the open end being located inside said substantially cylindrical
dividing member; and

wherein the working fluid is discharged from said container
through said discharge pipe.

8. The compressor according to claim 7, wherein a gap is
provided between an upper end of said dividing member and said container.

9. The compressor according to claim 7, wherein said dividing

member is provided with a communication hole between the inner space and the outer space.

10. The compressor according to claim 7, wherein said dividing member is provided inside said coil end provided on the upper end of said stator.

11. The compressor according to claim 7, wherein said dividing member is provided outside said coil end provided on the upper end of said stator.

12. The compressor according to claim 7, wherein an inner diameter of an upper portion of said dividing member is smaller than an inner diameter of a lower portion of said dividing member.

13. The compressor according to claim 1, wherein an upper portion of said container is domical in shape.

14. A compressor comprising:
a container;
a compression mechanism disposed in a lower portion of said container;
a rotational motor disposed in an upper portion of said container,
said rotational motor having a stator and a rotor;

a coil end provided on each of upper and lower ends of said stator;
a discharge pipe provided on an upper end of said container;
an oil reservoir provided in a lower portion of said container;
a gap provided between said rotational motor and said container,
said gap being operable to introduce working fluid, which is compressed
by said compression mechanism, into an upper space of said container;
an introduction terminal provided in said container and being
operable to supply electricity to said rotational motor; and
a cluster provided in said container and being adapted to connect
a lead wire from said rotational motor to said introduction terminal;
wherein said cluster is symmetric with respect to an axis thereof,
the axis of said cluster being substantially coincident with a rotation
central axis of said rotational motor; and
wherein the working fluid is discharged from said container
through said discharge pipe.

15. The compressor according to claim 1, further comprising:
an introduction terminal provided in said container and being
operable to supply electricity to said rotational motor; and
a cluster adapted to connect a lead wire from said rotational

motor to said introduction terminal, wherein said cluster is symmetric with respect to a center axis thereof, the center axis being substantially coincident with a rotation center axis of said rotational motor.

16. The compressor according to claim 14, wherein said cluster is columnar in shape.

17. The compressor according to claim 14, wherein said cluster is polygonal columnar in shape.

18. The compressor according to claim 14, wherein an outer diameter of said cluster is smaller than an inner diameter of said coil end.

19. The compressor according to claim 1, wherein carbon dioxide is used as the working fluid.

20. The compressor according to claim 7, wherein an upper portion of
said container is domical in shape.

21. The compressor according to claim 7, further comprising:
an introduction terminal provided in said container and being operable to supply electricity to said rotational motor; and

a cluster adapted to connect a lead wire from said rotational motor to said introduction terminal, wherein said cluster is symmetric with respect to a center axis thereof, the center axis being substantially coincident with a rotation center axis of said rotational motor.

22. The compressor according to claim 7, wherein carbon dioxide is used as the working fluid.

23. The compressor according to claim 14, wherein carbon dioxide is used as the working fluid.